Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A robot autosampler comprising:

(a) a housing;

(b) a chip holder mounted to the housing;

(c) an electrospray chip having a plurality of nozzles mounted to the chip holder;

(d) a probe carriage mounted to the housing and moveable between a sample source and the electrospray chip;

(e) a fluid delivery probe moveable within the probe carriage which loads a first disposable pipette tip onto the fluid delivery probe, accepts sample from the sample source into the first disposable pipette tip and discharges sample to a first nozzle on the electrospray chip, wherein the fluid delivery probe is in fluid communication with a pressure source;

(f) a first voltage applied to the electrospray chip; and

(g) a second voltage applied to the fluid sample contained in the disposable pipette tip loaded on the delivery probe, wherein the fluid voltage is electrically insulated from the chip voltage and wherein the first and second voltages and fluid pressure are controlled to provide a fluid flow rate and simultaneous voltage to form an electrospray of the fluid sample from the nozzle on the electrospray chip~~; wherein after the sample is sprayed the fluid delivery probe is further moveable within the probe carriage to unload the first disposable pipette tip and load a second disposable pipette tip onto the fluid delivery probe, accept sample from the sample source into the second disposable pipette tip and discharge sample to a second nozzle on the electrospray chip~~.

2. (previously presented) The robot autosampler of claim 1, wherein the fluid delivery probe is electrically insulated from the probe carriage.

3. (previously presented) The robot autosampler of claim 1, further comprising an alignment system which aligns the fluid delivery probe with the electrospray chip and the electrospray chip with a detector.

4. (previously presented) The robot autosampler of claim 1, further comprising a detector in electrospray communication with said electrospray chip.

5. (original) The robot autosampler of claim 4, wherein said detector comprises a mass spectrometer.

6. (original) The robot autosampler of claim 1, wherein said fluid delivery probe comprises a chromatographic column or desalting column.

7. (previously presented) The robot autosampler of claim 1, wherein said fluid delivery probe comprises a capillary tube.

8. (canceled)

9. (previously presented) The robot autosampler of claim 1, wherein the first voltage is applied to the substrate of the electrospray chip through the chip holder.

10. (previously presented) The robot autosampler of claim 1, further comprising a voltage probe electrically insulated from and mounted to said fluid delivery probe.

11. (previously presented) The robot autosampler of claim 1, wherein the second voltage is applied to the fluid sample through the fluid delivery probe.

12. (previously presented) The robot autosampler of claim 10, wherein said voltage probe provides electrospray voltage to the surface of the electrospray chip, independently to individual nozzles, groups of nozzles, or all nozzles at once.

13-14. (canceled)

15. (previously presented) The robot autosampler of claim 1, wherein said fluid delivery probe further comprises a seal which prevents leakage between the probe and the electrospray chip during delivery of the fluid to the electrospray chip.

16. (previously presented) The robot autosampler of claim 1, wherein said electrospray chip comprises a plurality of electrospray devices, each generating one or a multiple of electrospray plumes when activated.

17. (previously presented) The robot autosampler of claim 1, wherein said electrospray chip comprises multiple electrospray devices grouped in a high-density array, each generating one or a multiple of electrospray plumes when activated.

18 - 24 (canceled)

25. (previously presented) The robot autosampler of claim 1, further comprising an array of sample loading devices which holds a plurality of said devices.

26. (previously presented) The robot autosampler of claim 25, wherein said array of sample loading devices comprises an array of pipette tips, syringe tips or capillary tubes.

27. (previously presented) The robot autosampler of claim 26, wherein said pipette tips are in arrays consisting of 96 or 384 tips.

28. (previously presented) The robot autosampler of claim 1, further comprising a sample tray comprising an array of sample wells.

29. (previously presented) The robot autosampler of claim 1, wherein said fluid delivery probe rotates through 90 degrees between the sample source and the electrospray chip.

30. (previously presented) The robot autosampler of claim 25, wherein said sample loading device is pre-loaded with sample.

31. (previously presented) The robot autosampler of claim 1, further comprising a syringe pump or other liquid pump connected to the fluid delivery probe.

32. (previously presented) The robot autosampler of claim 31, wherein said syringe pump or other liquid pump provides fluid to deliver sample to said electrospray chip.

33. (previously presented) The robot autosampler of claim 1, wherein said chip holder is positionable within less than 10 microns.

34. (previously presented) The robot autosampler of claim 1, wherein said fluid delivery probe is aligned to a fixed position accurately to within less than 40 microns.

35. (previously presented) The robot autosampler of claim 1, wherein said housing can move with respect to said detector while electrospraying said sample.

36. (new) The robot autosampler of claim 1, wherein the pressure source is a syringe pump.

37. (new) The robot autosampler of claim 1, wherein the pressure source provides a pressure to the fluid of less than 5 psi.

38. (new) The robot autosampler of claim 1, wherein the pressure source is regulated to provide a flow rate of up to about 2 μL/minute.